AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled).

2. (currently amended) ~~A frame memory device according to Claim 1~~A frame memory device which sequentially receives raster-scanned digital color image signals, and sequentially stores the image signals in a memory having a two-dimensional address structure, such that vertical addresses represent the order of entry of respective scan lines that constitute said image signals and horizontal addresses represent the order of entry of respective signals that belong to each of the scan lines, and which sequentially reads out the stored signals from said memory so as to output the signals again as raster-scanned signals, said frame memory device being characterized by comprising:

signal rearranging means for rearranging the order of received signals to be stored in said memory; and

subsampling and read-out means for reading out stored signals while skipping horizontal and vertical addresses of said memory at regular intervals, whereby the stored image signals that are subsampled are read out from said memory so as to output raster-scanned image signals at lower resolution than that of the received image signals, wherein

the received image signals comprise YC_BC_R color signals having a sampling ratio of 4:2:2, in which the number of horizontal pixels of C_B and C_R signals is equal to one half that of Y signals, and wherein the Y signals and the C_B and C_R signals are input and output in parallel with each other from a Y bus and a C bus, respectively, and the Y signals and C_B and C_R signals of a frame of said image signals are written into and read out from a Y memory and a C memory, respectively, constituting said memory, with the Y and C signals transmitted in parallel with each other, said C_B and C_R signals being multiplexed at alternate pixels and input and output from the C bus in the order of $C_B \rightarrow C_R$, and being characterized in that:

said signal rearranging means rearranges the C_B and C_R signals in the order of $C_B \rightarrow C_B \rightarrow C_R \rightarrow C_R$ to alternate the signals at every other pixel, and the C_B and C_R signals rearranged by said means are synchronized with the Y signals so that the Y and C signals are respectively written into said Y memory and said C memory in parallel with each other, and in that said subsampling and read-out means accesses alternate ones of horizontal and vertical addresses of said Y memory and C memory to read out the Y and C signals in parallel with each other, thereby to output raster-scanned YC_BC_R image signals that have been subsampled to one half in both horizontal and vertical directions by said subsampling and read-out means.

3. (currently amended) ~~A frame memory device according to Claim 1~~A frame memory device which sequentially receives raster-scanned digital color image signals, and sequentially stores the image signals in a memory having a two-dimensional address structure, such that vertical addresses represent the order of entry of respective scan lines that constitute said image signals and horizontal addresses represent the order of entry of respective signals that belong to each of the scan lines, and which sequentially reads out the stored signals from said memory so as to output the signals again as raster-scanned signals, said frame memory device being characterized by comprising:

signal rearranging means for rearranging the order of received signals to be stored in said memory; and

subsampling and read-out means for reading out stored signals while skipping horizontal and vertical addresses of said memory at regular intervals, whereby the stored image signals that are subsampled are read out from said memory so as to output raster-scanned image signals at lower resolution than that of the received image signals, wherein the received image signals comprise YC_BC_R color signals having a sampling ratio of 4:2:2, in which the number of horizontal pixels of C_B and C_R signals is equal to one half that of Y signals, and wherein the Y signals and the C_B and C_R signals are input and output in parallel with each other from a Y bus and a C bus, respectively, and the Y signals and C_B and C_R signals of a frame of said image signals are written into and read out from a Y memory and a C memory,

respectively, constituting said memory, with the Y and C signals transmitted in parallel with each other, said C_B and C_R signals being multiplexed at alternate pixels and input and output from the C bus in the order of $C_R \rightarrow C_B$, and being characterized in that:

said signal rearranging means rearranges the C_B and C_R signals in the order of $C_R \rightarrow C_R \rightarrow C_B \rightarrow C_B$ to alternate the signals at every other pixel, and the C_B and C_R signals rearranged by said means are synchronized with the Y signals so that the Y and C signals are respectively written into said Y memory and said C memory in parallel with each other, and in that said subsampling and read-out means accesses alternate ones of horizontal and vertical addresses of said Y memory and C memory to read out the Y and C signals in parallel with each other, thereby to output raster-scanned YC_BC_R image signals that have been subsampled to one half in both horizontal and vertical directions by said subsampling and read-out means.

4. (original) A frame memory device according to Claim 2, characterized in that horizontal scan frequency and vertical scan frequency of the image signals generated in a raster scanning scheme from the frame memory device are equal to those of NTSC or PAL television signals.

5. (original) A frame memory device according to Claim 3, characterized in that horizontal scan frequency and

vertical scan frequency of the image signals generated in a raster scanning scheme from the frame memory device are equal to those of NTSC or PAL television signals.

6. (cancelled.

7. (currently amended) ~~A method according to Claim 6~~A method of outputting raster-scanned digital color image signals at lower resolution than that of sequentially received raster-scanned digital color image signals, comprising:

rearranging the order of received signals;

sequentially storing the rearranged signals in a memory having a two-dimensional address structure, such that vertical addresses represent the order of entry of respective scan lines that constitute the received image signals and horizontal addresses represent the order of entry of respective signals that belong to each of the scan lines; and

subsampling and reading out stored signals while skipping horizontal and vertical addresses of said memory at regular intervals;

wherein the rearranging and subsampling are correlated so as to output raster-scanned image signals at lower resolution than that of the received image signals, wherein the received image signals comprise YC_BC_R color signals having a sampling ratio of 4:2:2, in which the number of horizontal pixels of C_B and C_R signals is equal to one half

that of Y signals, and wherein the Y signals and the C_B and C_R signals are input and output in parallel with each other from a Y bus and a C bus, respectively, and the Y signals and C_B and C_R signals of a frame of said image signals are written into and read out from a Y memory and a C memory, respectively, constituting said memory, with the Y and C signals transmitted in parallel with each other, and wherein the C_B and C_R signals are multiplexed at alternate pixels and input and output from the C bus in the order of $C_B \rightarrow C_R$ and the received C_B and C_R signals are rearranged in the order of $C_B \rightarrow C_B \rightarrow C_R \rightarrow C_R$ to alternate the signals at every other pixel, and the rearranged $C_B \rightarrow C_R$ signals are synchronized with the Y signals so that the Y and C signals are respectively written into said Y memory and said C memory in parallel with each other, and wherein the subsampling and reading out accesses alternate ones of horizontal and vertical addresses of said Y memory and C memory to read out the Y and C signals in parallel with each other, thereby to output raster-scanned YC_BC_R image signals that have been subsampled to one half in both horizontal and vertical directions.

8. (currently amended) ~~A method according to Claim 6~~A method of outputting raster-scanned digital color image signals at lower resolution than that of sequentially received raster-scanned digital color image signals, comprising:

rearranging the order of received signals;

sequentially storing the rearranged signals in a memory having a two-dimensional address structure, such that vertical addresses represent the order of entry of respective scan lines that constitute the received image signals and horizontal addresses represent the order of entry of respective signals that belong to each of the scan lines; and

subsampling and reading out stored signals while skipping horizontal and vertical addresses of said memory at regular intervals;

wherein the rearranging and subsampling are correlated so as to output raster-scanned image signals at lower resolution than that of the received image signals, wherein the received image signals comprise YC_BC_R color signals having a sampling ratio of 4:2:2, in which the number of horizontal pixels of C_B and C_R signals is equal to one half that of Y signals, and wherein the Y signals and the C_B and C_R signals are input and output in parallel with each other from a Y bus and a C bus, respectively, and the Y signals and C_B and C_R signals of a frame of said image signals are written into and read out from a Y memory and a C memory, respectively, constituting said memory, with the Y and C signals transmitted in parallel with each other, and wherein the C_B and C_R signals are multiplexed at alternate pixels and input and output from the C bus in the order of $C_R \rightarrow C_B$ and the received C_B and C_R signals are rearranged in the order of

$C_R \rightarrow C_R \rightarrow C_B \rightarrow C_B$ to alternate the signals at every other pixel, and the rearranged $C_R \rightarrow C_B$ signals are synchronized with the Y signals so that the Y and C signals are respectively written into said Y memory and said C memory in parallel with each other, and wherein the subsampling and reading out accesses alternate ones of horizontal and vertical addresses of said Y memory and C memory to read out the Y and C signals in parallel with each other, thereby to output raster-scanned YC_BC_R image signals that have been subsampled to one half in both horizontal and vertical directions.

9. (original) A method according to Claim 7, wherein signals are read out from said memory in a raster-scanning scheme having horizontal and vertical scan frequencies equal to those of NTSC or PAL television signals.

10. (original) A method according to Claim 8, wherein signals are read out from said memory in a raster-scanning scheme having horizontal and vertical scan frequencies equal to those of NTSC or PAL television signals.

Claims 11-22 (cancelled).